ABSTRACT OF THE DISCLOSURE

The present disclosure relates to methods and compositions for *in vitro* cultivation of species of *Polygonatum*, *e.g. Polygonatum cirrhifolium* Royle. The disclosure provides culture media comprising MS basal culture media and plant hormones, preferably selected from the group consisting of gibberellic acid (GA_3), 6-benzyl-aminopurine (BAP), and naphthalene acetic acid (NAA). The disclosure provides methods of *in vitro* cultivation of *Polygonatum* comprising contacting *Polygonatum* seeds with a first medium comprising MS basal culture medium and GA_3, upon emergence of a hypocotyl, transferring this primary explant to a second medium comprising MS basal culture medium, BAP, and NAA, and upon emergence of a first foliage leaf, transferring this secondary explant to a third medium comprising MS basal culture medium, BAP, NAA, and gibberellic acid (GA_3). The methods and compositions of the disclosure are capable of inducing and/or supporting uniform germination in less than about 90 days, synchronized development of epicotyl, coleoptile, and radicle, termination of epicotyl dormancy and combinations thereof. The present disclosure relates to the novel culture medium compositions, said compositions comprising Murashige and Skoog (MS), a basal culture medium, varied concentrations of plant hormones, and other additives, leading to extraordinarily fast and synchronized *in vitro* induction of germination and release of epicotyl dormancy in *Polygonatum cirrhifolium Royle*, an endangered medicinal plant species and a method for faster *in vitro* propagation of *Polygonatum cirrhifolium* Royle.